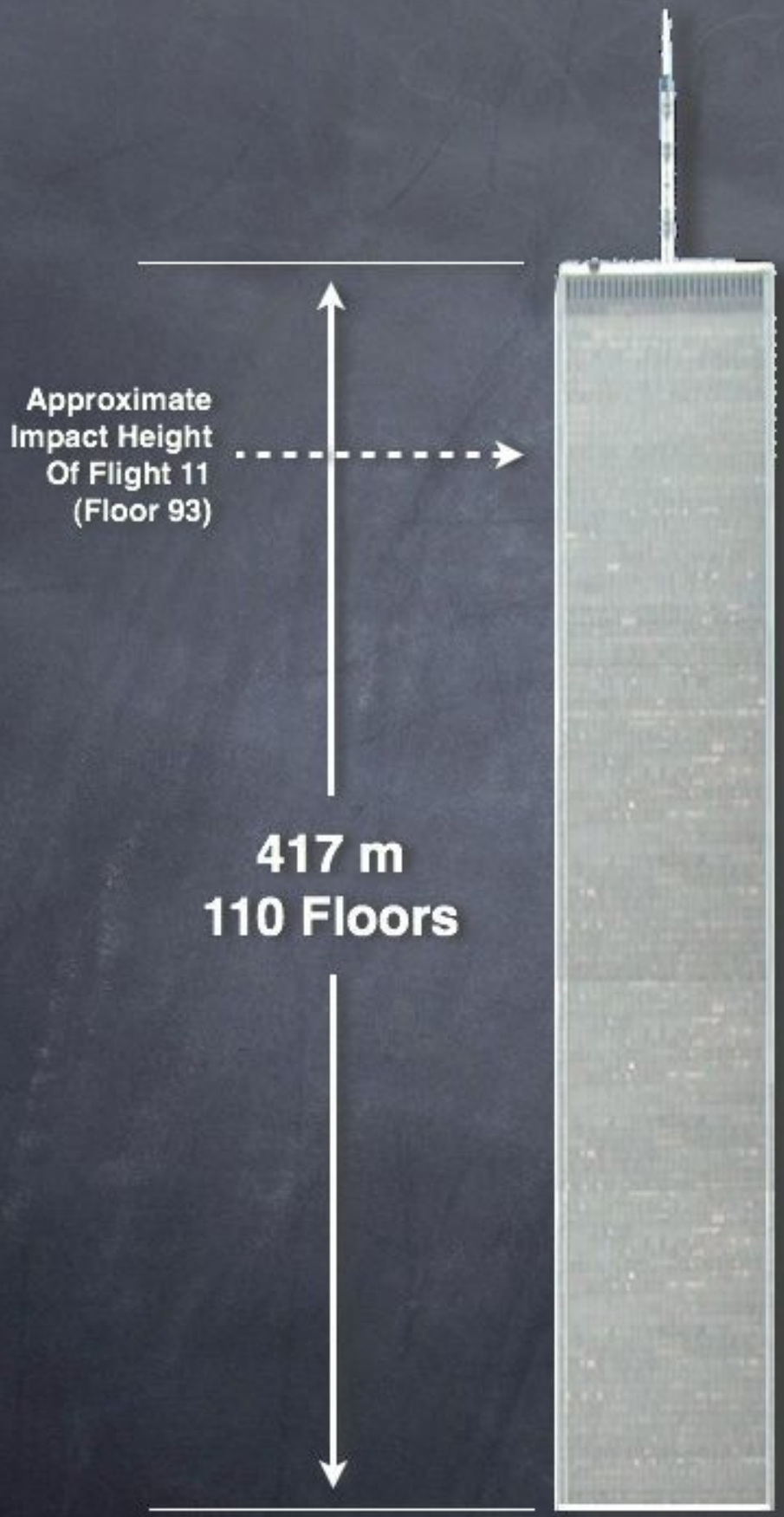
Physics Of 9/11

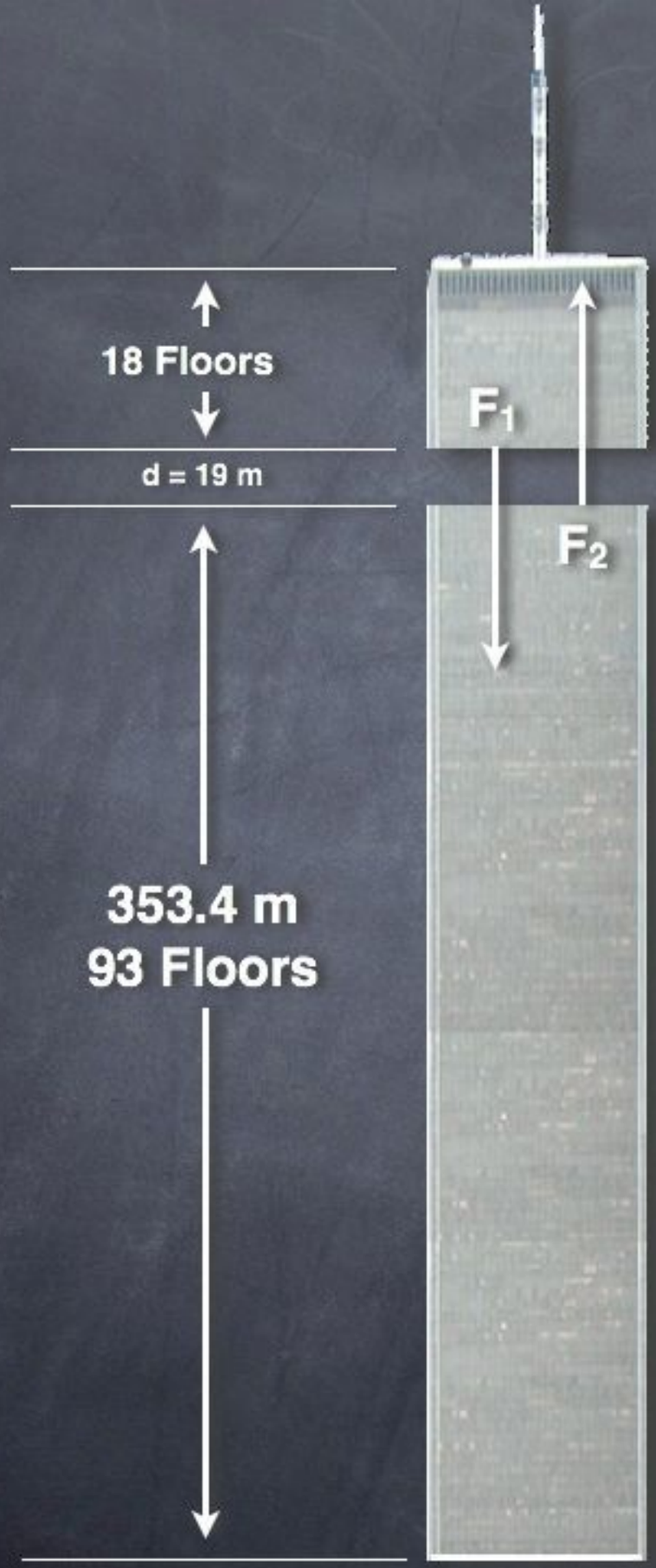
Why The World Trade Center Towers *Could Not*, According To The Basic Laws Of Dynamics, Have Fallen At The Speeds At Which They Were Observed To Fall, Unless Forces Other Than Weight And Gravity Were At Work

WTC1, North Tower



WTC1 Loaded Mass	450,000,000 kg
WTC1 Loaded Floor Mass	4,100,000 kg
WTC1 Floor Height	3.8 m
Height Of 5 Impacted Floors	19 m
Height Of Lowest Damaged Floor (93)	353.4 m
Number Of Floors Above Impact	18 floors

WTC1, North Tower



$v^2 = v_0^2 + 2ad$

$v^2 = 0 + 2 \cdot 9.81\ m/s^2 \cdot 19\ m$

$v = 19.3\ m/s$

$F = ma$

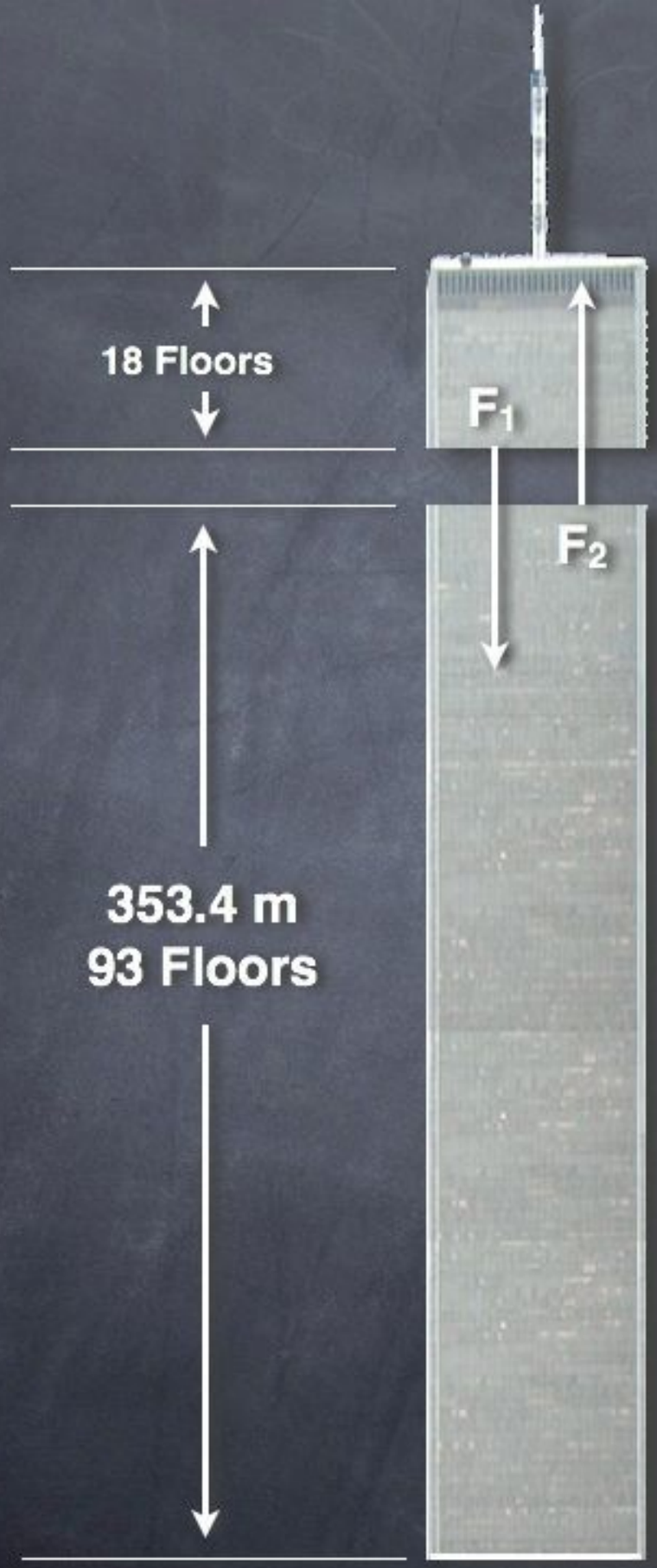
$F_1 = mg = 18 \cdot 4{,}100{,}000\ kg \cdot 9.81\ m/s^2$

$F_1 = 723{,}978{,}000\ N$

$F_2 = (m + m_s)g = 18 \cdot 4{,}500{,}000\ kg \cdot 9.81\ m/s^2$

$F_2 = -794{,}610{,}000\ N$

WTC1, North Tower



$F_1 = 723{,}978{,}000\ N$

$F_2 = -794{,}610{,}000\ N$

$$\Sigma F = \Sigma m \cdot \Sigma a$$

$$\Sigma a = \frac{\Sigma F}{\Sigma m}$$

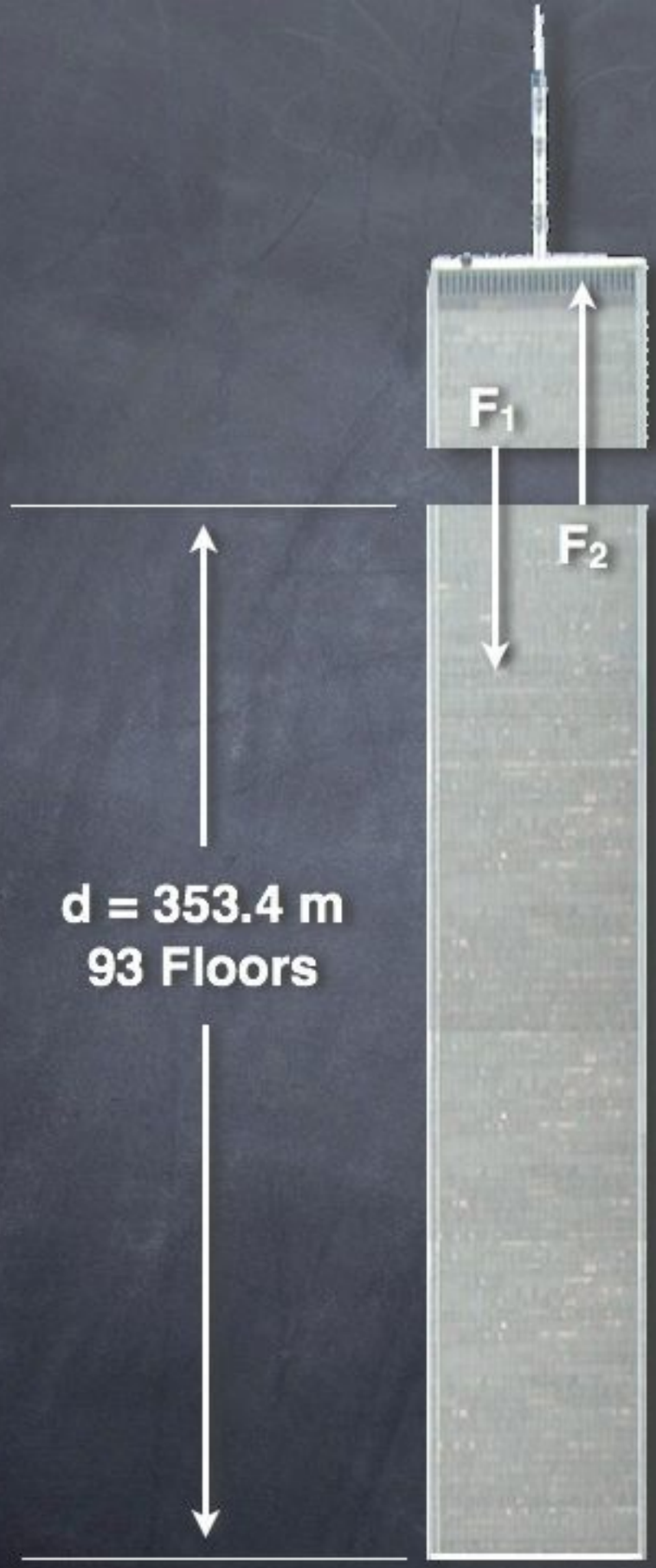
$$\Sigma a = \frac{723{,}978{,}000\ N - 794{,}610{,}000\ N}{18 \cdot (4{,}500{,}000\ kg + 4{,}100{,}000\ kg)}$$

$\Sigma a = -0.456\ m/s^2$

$a_0 = 0$

$a = -0.456\ m/s^2$

WTC1, North Tower



$d = 353.4\ m$

$v_0 = 19.3\ m/s$

$a = -0.456\ m/s^2$

$d = v_0t + .5at^2$

$353.4\ m = 19.3\ m/s \cdot t + .5 \cdot -0.456\ m/s^2 \cdot t^2$

$353.4 = 19.3t - 0.228t^2$

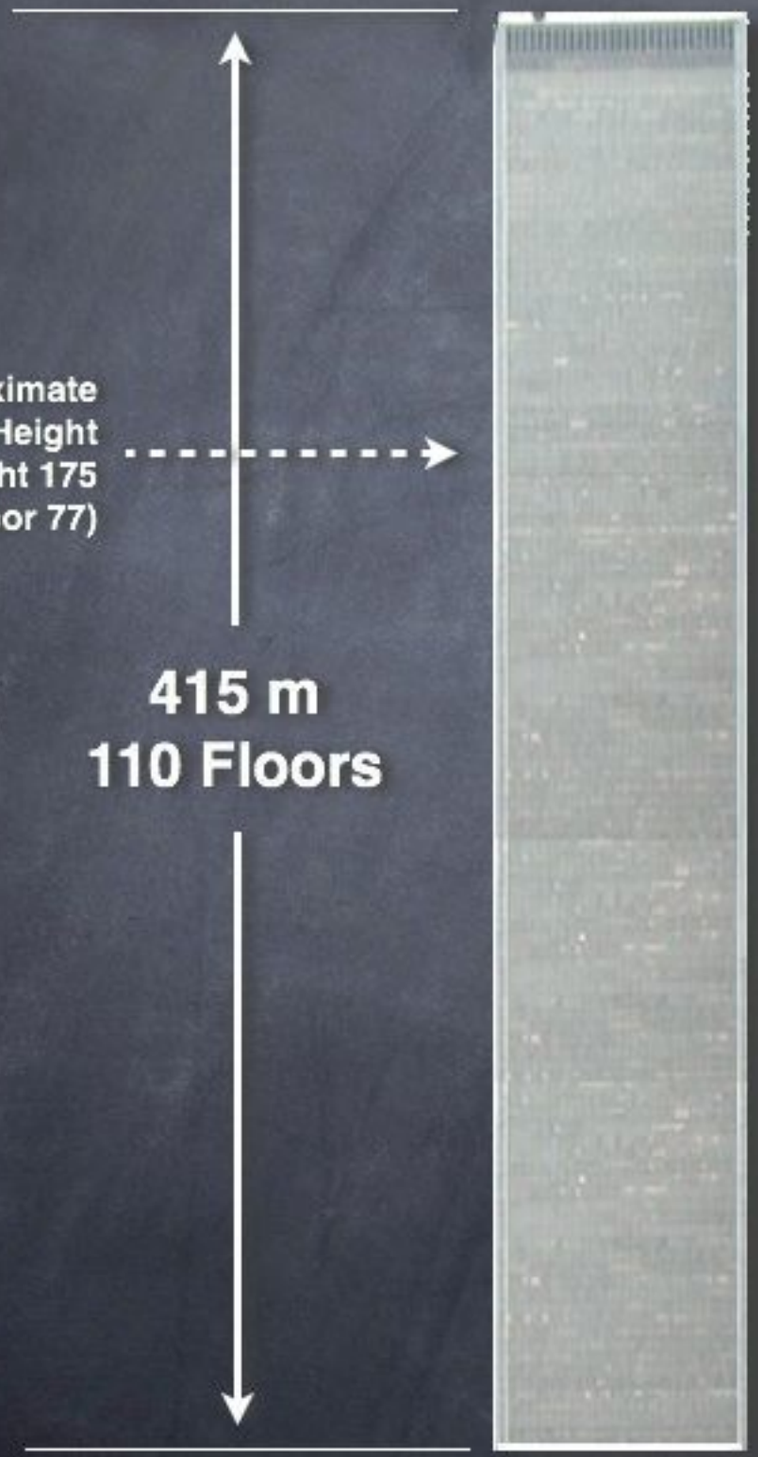
$-0.228t^2 + 19.3t - 353.4 = 0$

Quadratic Equation: $ax^2 + bx + c = 0$

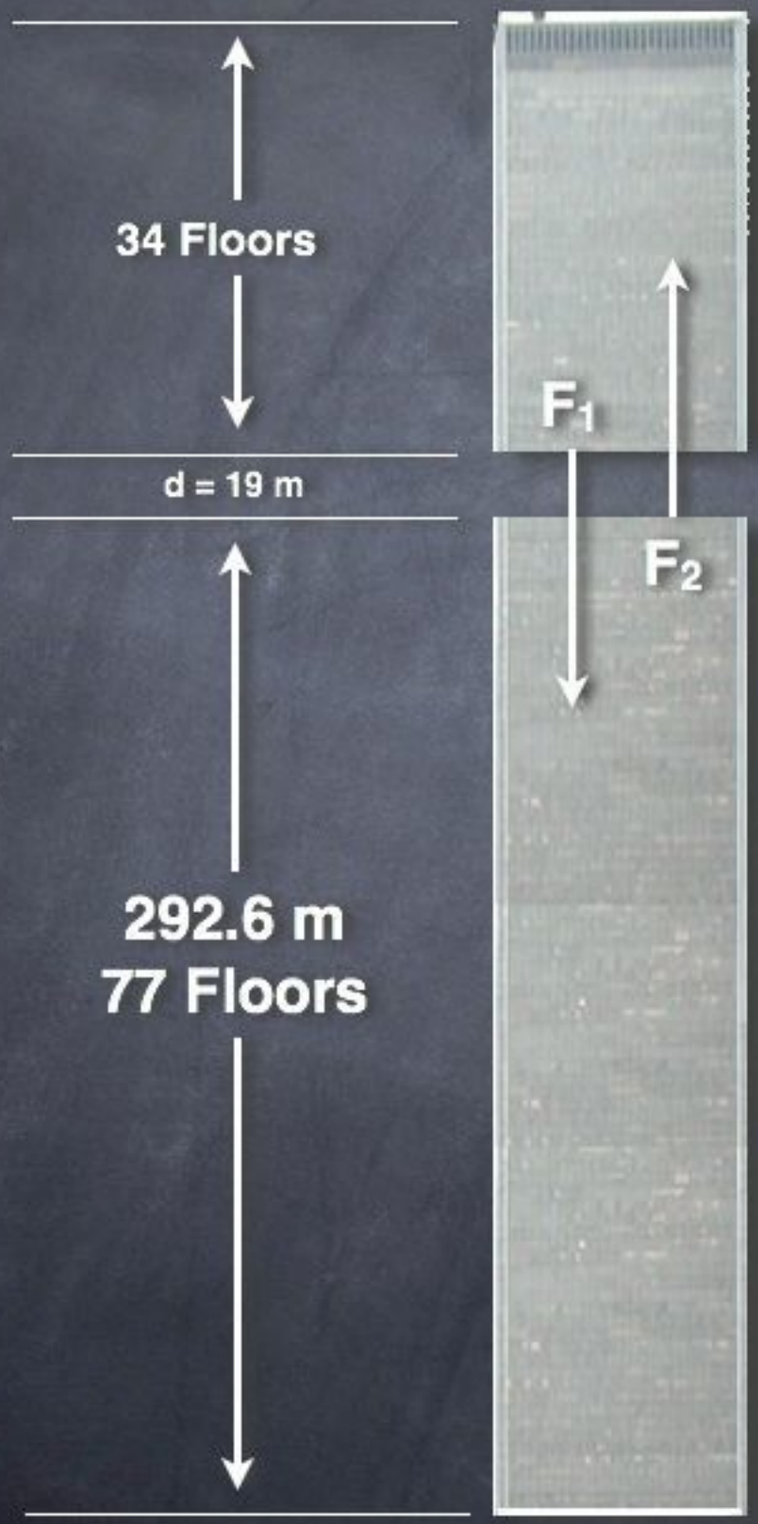
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$t = 26.79\ s$

WTC2, South Tower



WTC2 Loaded Mass	450,000,000 kg
WTC2 Loaded Floor Mass	4,100,000 kg
WTC2 Floor Height	3.8 m
Height Of 5 Impacted Floors	19 m
Height Of Lowest Damaged Floor (77)	292.6 m
Number Of Floors Above Impact	34 floors



$v^2 = v_0^2 + 2ad$

$v^2 = 0 + 2 \cdot 9.81\ m/s^2 \cdot 19\ m$

$v = 19.3\ m/s$

$F = ma$

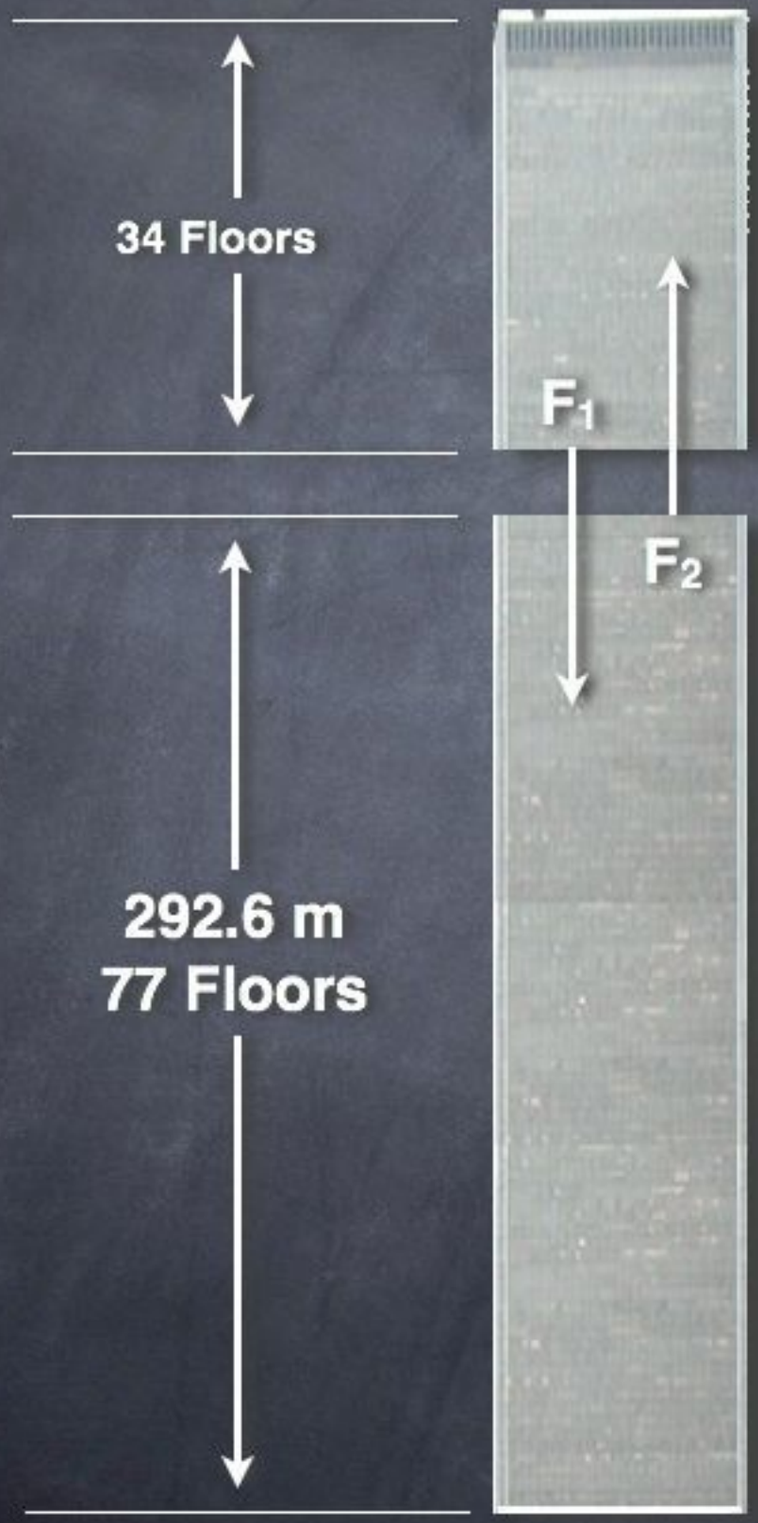
$F_1 = mg = 34 \cdot 4{,}100{,}000\ kg \cdot 9.81\ m/s^2$

$F_1 = 1{,}367{,}514{,}000\ N$

$F_2 = (m + m_s)g = 34 \cdot 4{,}500{,}000\ kg \cdot 9.81\ m/s^2$

$F_2 = -1{,}500{,}930{,}000\ N$

WTC2, South Tower



$F_1 = 1{,}367{,}514{,}000\ N$

$F_2 = -1{,}500{,}930{,}000\ N$

$$\Sigma F = \Sigma m \cdot \Sigma a$$

$$\Sigma a = \frac{\Sigma F}{\Sigma m}$$

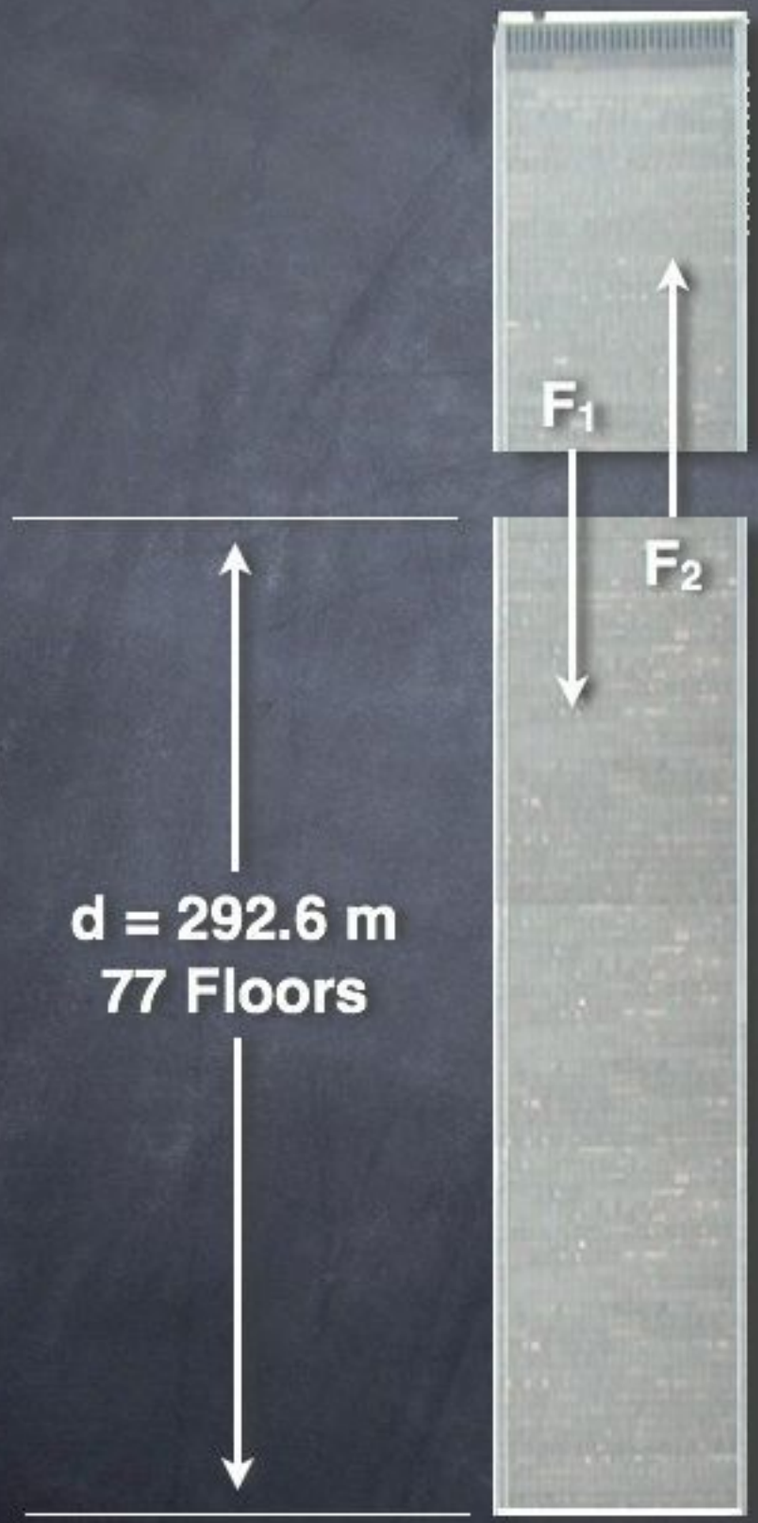
$$\Sigma a = \frac{1{,}367{,}514{,}000\ N - 1{,}500{,}930{,}000\ N}{34 \cdot (4{,}500{,}000\ kg + 4{,}100{,}000\ kg)}$$

$$\Sigma a = -0.456\ m/s^2$$

$$a_0 = 0$$

$$a = -0.456\ m/s^2$$

WTC2, South Tower



$d = 292.6\ m$

$v_0 = 19.3\ m/s$

$a = -0.456\ m/s^2$

$d = v_0t + .5at^2$

$292.6\ m = 19.3\ m/s \cdot t + .5 \cdot -0.456\ m/s^2 \cdot t^2$

$292.6 = 19.3t - 0.228t^2$

$-0.228t^2 + 19.3t - 292.6 = 0$

Quadratic Equation: $ax^2 + bx + c = 0$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$t = 19.78\ s$

NIKOLA TESLA
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July 7th, 8th, 9th & 10th in Philadelphia, PA

TESLA SCIENCE CONFERENCE

July 7th, 8th, 9th & 10th, 8:30 am - 5:00 pm
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50 South 16th Street
Registration $100
($50 for students with valid student ID)

TESLA SCIENCE FOUNDATION SOCIAL
Featuring: The Divine Hand Ensemble

July 9th, 5:30 pm - 10:30 pm
Ethical Society of Philadelphia
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$20 In Advance, $24 At The Door

TESLA BIRTHDAY CELEBRATION
Featuring: A Tesla Coil Exhibition

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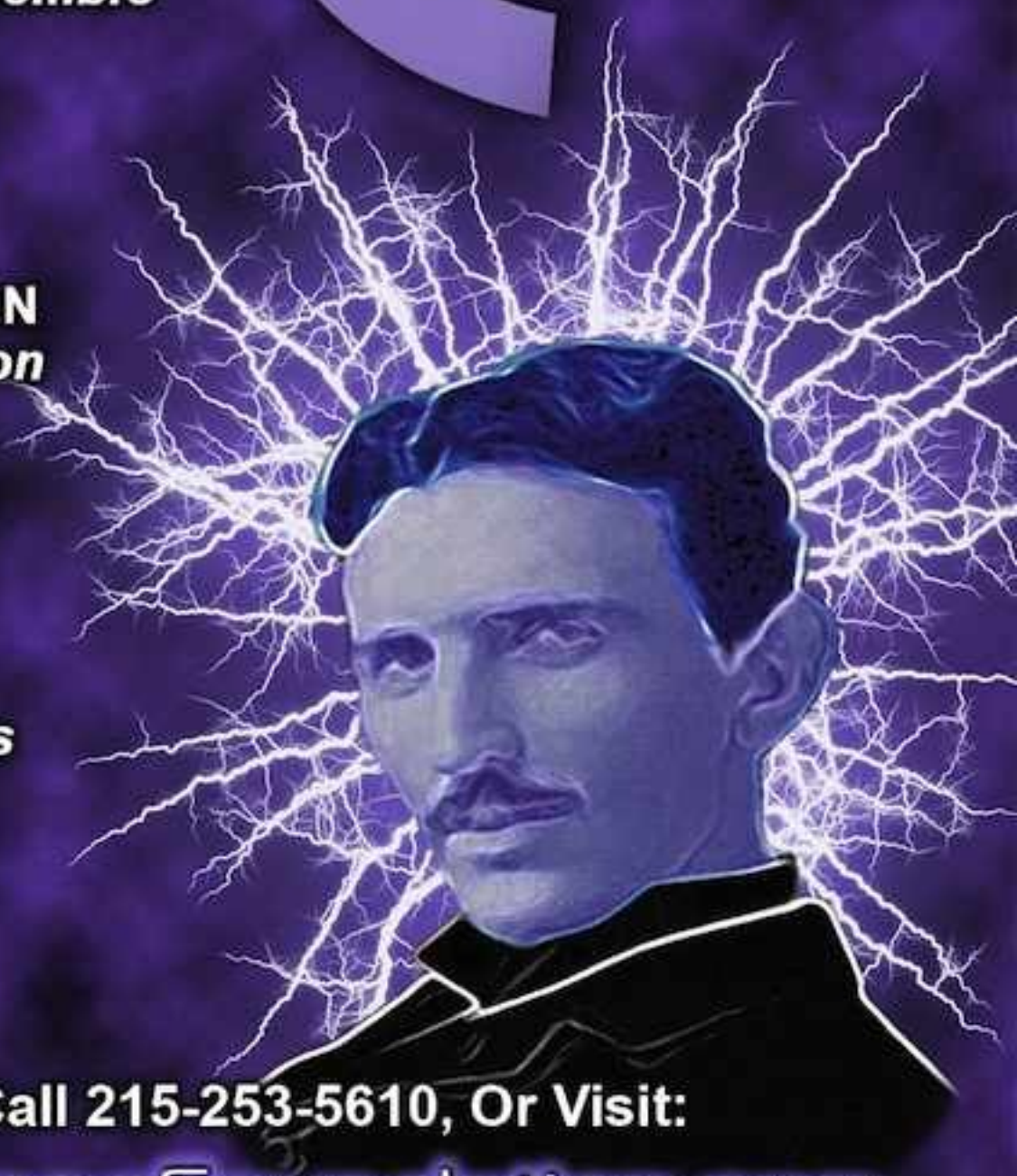
Independence Visitors Center
5th & Market Streets
Free To Attend

T.E.S.L.A. FEST
Exhibitions & Open Discussions

July 9th, 10:00 am - 11:00 pm
July 10th, 11:00 am - 3:00 pm
Independence Visitors Center
5th & Market Streets
Free To Attend

tesla
science foundation



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